Bandolier

What do we think? What do we know? What can we prove? 43

Evidence-based health care

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EDITORIAL

Bandolier has spent a lot of it's life agonising over diagnosis. It remembers an ultrasound diagnosis of an early miscarriage, and an eminent and experienced gynaecologist who didn't believe the diagnosis because it "didn't feel right". The miscarriage is now off to University. Our experience is that we need more information about demonstrating effectiveness of diagnostic tests. Interesting things on diagnostics are like buses. You wait for ages and then lots come along at the same time. So we have focused on diagnostics this month.

In the past there was too little information. Now two systematic reviews of the highest quality have been published, and we examine one of them (on the use of foetal fibronectin to predict preterm delivery) in detail on page 2. We also examine how different the pathological diagnosis of gastric cancer is between Japan and North America and Europe, and how even experienced colonoscopists may miss quite a number of adenomas in a single examination (page 4).

But there is good news on the prostate cancer front, where preliminary studies of a new type of prostate specific antigen test, combined with low prostate volume, seems to be able reliably to distinguish between cancer and benign hyperplasia (page 4). Not only might this save some unnecessary biposies, but there is also a suggestion that this test is the one that might just distinguish agressive tumours - or tell the tigers from the pussycats.

Something for the weekend

One of the things that *Bandolier* set out to do was to give its readers early warning of the effectiveness of new interventions and treatments. That has been quite difficult, as much as anything because of the need to examine the vast amount of information on interventions we already use.

We were struck by the increasing literature on treatment of erectile dysfunction, because of two quality trials in the New England Journal of Medicine (page 5). So *Bandolier* did some mental NNT calculations, and was surprised at the effectiveness of these. According to some estimates, erectile dysfunction is a common (though probably not much discussed) problem. We also chased down some information from the *Guardian* which told us that an oral preparation was on the way.

Now while all this begs for some schoolboy hilarity, the combination of a common problem and effective treatment in an area where demand could be high poses real problems for the NHS. It seemed to *Bandolier* worthy of some early thought. Take five minutes to think about the combinations of problems that this will bring for prescribers and commissioners.

4TH BANDOLIER CONFERENCE

CHLAMYDIA - What should we be doing?

This will be held at The Wellcome Building, 183 Euston Rd, London on Monday Oct 27th, 1997, starting at 9.45 am. The draft programme is:

- Setting the scene
- Perspectives from primary care and the community
- ♦ Perspectives from the hospital
- ♦ Current diagnostic tests
- ♦ New diagnostic tests in the pipeline
- ♦ Current treatments
- Systematic review of current treatments
- ♦ Economic issues in Chlamydial infection

The format will be a series of short (20 minute) presentations, with at least the same time for questions and discussion. At the end we will try and agree what questions we think we can answer, what are the next questions for which we need answers, and what we should do now. If anyone has a worked example of getting effective measures into practice, we'd like to know about it to see if we can use it as an exemplar either in the conference or in a subsequent summary.

The cost is £135 (NHS) or £270 (non-NHS). Cheques should be made payable to "Oxford Medical Knowledge" and sent to Eileen Neail at the *Bandolier* office.

5th Bandolier conference

This will be on the subject of new treatments for HIV, and will again be at the Wellcome Building in London on December 17th. Fax Eileen Neail on 01865 226978 for early details.

In this issue

Predicting preterm deliveryp. 2
Diagnosing gastric cancerp. 3
Prostate cancer diagnosisp. 3
Colonoscopy accuracyp. 4
Erectile dysfunction treatmentsp. 5
Effective journal clubsp. 7
Net newsp. 7
Book review - Hystoriesp.8
Some EB courses and meetingsp. 8
The views expressed in Bandolier are those of the authors, and are
not necessarily those of the NHSE Anglia & Oxford

MINDSTRETCHER ON DIAGNOSTICS

Bandolier is interested in better ways of making diagnoses, and in particular looks for systematic reviews of diagnostic tests. We can be reasonably comfortable about ways of assessing the evidence for treatment trials, knowing about sources of bias from failure to randomise or to blind trials.

But for diagnostic tests the rules are still being written. And worse, we have few examples where such evidence as exists shows the test in a particularly good light. This month, therefore, *Bandolier* concentrates on some news from the diagnostic test front - some good, some hopeful, but some giving cause for concern. There are two "eat-your-heart-out" reviews, one on foetal fibronectin [1] predicting preterm delivery which we feature. The other on the diagnosis of left-sided heart failure [2] is one of those articles to which no précis can do justice. So for those of you who are interested - read it!

1 Preterm delivery prediction

To some people it is the destination that matters (does this work, and how well does it work?). Others are more interested in the route we travel (how do we know if it works, could we be wrong in our conclusions?). So all the better when one finds an exceptional piece of work which satisfies both these appetites.

A systematic review of the use of cervico-vaginal foetal fibronectin from Dundee [1] is one of the best examples of a diagnostic test review *Bandolier* has seen to date. It's one of those papers we wish had our name on. Anyone interested in doing a systematic review of a diagnostic test should read this paper. Anyone whose profession involves diagnostics should be ashamed if they don't read it.

Background

Foetal fibronectin is found in amniotic fluid and placental tissue. Mechanical or inflammatory damage to the membranes and placenta before preterm delivery may result in release of foetal fibronectin into cervico-vaginal fluid. So if you take a swab, and analyse the fluid for foetal fibronectin, then presto!, if it is raised preterm delivery may be imminent. Well that's the theory. So the chaps from Dundee searched the literature for appropriate studies. Their searching and methods section where they explain the great lengths they went to to legitimise the analysis is highly detailed and of the highest quality, as is their reporting of the quality issues in the primary studies they found.

So does the test work?

Well sort of. The results are shown in the table, with pre-test probabilities calculated from the pooled prevalence in the studies and post-test probabilities calculated by applying the likelihood ratios for a positive test (\geq 50 ng/mL) or negative test (\leq 50 ng/mL) using either laboratory or bedside tests.

The key question, according to the authors, is whether delivery is likely within one week of the test being done. Few studies addressed that, but the results were not encouraging. The best that can be said is that in symptomatic women, the combination of low delivery rates in the week following the test, plus a low likelihood ratio of a negative test meant that a negative test in these women gave about a 1% chance of delivery in the following week.

Of course, the test could be used in conjunction with other independent tests, chemical, clinical, or physical to generate better diagnostic accuracy.

2 More about Kappa

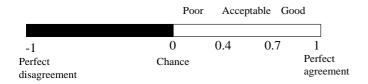
Some of our correspondents were concerned that *Bandolier* was unfair to pathologists in emphasising the subjective variation that can occur in what was formerly regarded as the gold standard, namely histopathological diagnosis. In *Bandolier* 37 we pointed out that there was considerable variation both in how pathologists classified phenomena they were looking at and the meaning they attached to the name they had given particular phenomena they had observed.

Population	Outcome	Test result	Pretest probability	Likelihood ratio	Post-test probability
Sympt	tomatic women		(%)		(%)
	Delivery <37 weeks	Positive Negative	34 (30 - 37)	4.6 (3.5 - 6.1) 0.5 (0.4 - 0.6)	70 (63 - 76) 21 (17 - 25)
	Delivery <34 weeks	Positive Negative	33 (24 - 41)	2.6 (1.8 - 3.7) 0.2 (0.1 - 0.5)	56 (43 - 67) 8 (3 - 20)
	Delivery within 1 week	Positive Negative	7 (4 - 9)	5.0 (3.8 - 6.4) 0.2 (0.1 - 0.4)	26 (18 - 36) 1 (0.4 - 3.1)
Asymptomatic women					
Low risk	Delivery <37 weeks	Positive Negative	25 (22 - 28)	3.2 (2.2 - 4.8) 0.8 (0.7 - 0.9)	52 (41 - 63) 22 (19 - 26)
High risk	Delivery <37 weeks	Positive Negative	32 (23 - 40)	2.0 (1.5 - 2.6) 0.4 (0.2 - 0.8)	48 (37 - 43) 17 (9 - 28)
	Delivery <34 weeks	Positive Negative	16 (10 - 21)	2.4 (1.8 - 3.2) 0.6 (0.4 - 0.9)	31 (21 - 43) 10 (6 - 17)
Values in parenthesis are 95% confidence intervals					

Need for Kappa

Kappa is a measure of agreement which takes into account the probability that some agreement will occur by chance. Imagine a situation in which 98% of the population are known to be free from tuberculosis. Anyone looking at 100 X-rays could call all of them negative, safe in the knowledge that they would have at least a 98% agreement with the best radiologist in the world. This is manifestly absurd. So we use Kappa as one technique of letting us know how well we agree. The Kappa scale ranges from zero (no better agreement than would be expected by chance) to 1 (perfect agreement).

Kappa



3 Diagnosing gastric cancer

The incidence of gastric cancer is reported to be high in Japan, put down to factors like genetics and diet. But no-one has tested the idea that Japanese and Western pathologists may differ about what constitutes gastric cancer.

Eight pathologists from Japan, North America and Europe individually reviewed 35 microscope slides of specimens from 17 Japanese patients [3]. There wasn't a great deal of agreement - as the table shows when suspected carcinomas are grouped with definite carcinomas.

When the opinion of the majority of pathologists was taken as a final diagnosis, there was agreement between Japanese and Western pathologists in only 11 of 35 slides. This gave a Kappa of 0.15 (95% confidence interval 0.01 to 0.29). In seven slides, Western pathologists diagnosed low-grade adenoma or dysplasia, whereas the Japanese pathologists diagnosed definite carcinoma in four slides and suspected carcinoma in one. Of the 12 slides which Western pathologists graded as having "high-grade adenoma and dysplasia", the Japanese gave the diagnosis of definite carcinoma in 11 and suspected carcinoma in one.

There is a "so what?" question hanging here. Does it matter? An accompanying editorial [4] concludes that some Japanese patients may have unnecessary resections, but that some Western patients with lesions at high risk of progressing to advanced cancer may remain untreated.

4 More prostate cancer than you think

The gold standard for diagnosis of prostate cancer has become the sextant biopsy. This is a technique where men suspected of having cancer (raised PSA, or symptoms, or abnormal rectal examination) have the gland biopsied with six needles. Usually done under sedation, this is eye-wateringly painful. Pathologists then look to see if they can find cancerous tissue in these six samples of prostate gland.

But there is an old adage, that the more you look, the more you find. If you were to have your prostate biopsied in North Carolina, the chances are that a different biopsy technique would be used, one that takes 13 samples of the prostate gland [5]. In a series of 119 men having biopsies, 31 were shown to have cancer using biopsies from the usual sextant position, but an additional 17 (35% more) using all 13 biopsy specimens. Most of the additional 17 cancers detected were fairly advanced.

This is mind-blowing stuff if repeated. It means re-thinking much of what we think we know about prostate cancer screening, because all those strategies which have been, or are being tested are predicated upon the sextant biopsy as the gold standard. But if the gold standard is tarnished, what do we think then?

5 New PSA test may help

PSA in plasma is predominantly bound to alpha-1-antichymotrypsin. Tests for measuring the percentage of free PSA (that fraction not bound to proteins like alpha-1-antichymotrypsin) are being used in making the differential diagnosis of prostate cancer and BPH. This may have real potential, not least because the Baltimore Longitudinal Study of Ageing has indicated, albeit in a small number of men, that the percentage of free PSA in serum is predictive of tumour aggression [6].

		Japanese		
	_	Adenoma or reactive epithelium	Suspected or definite carcinoma	Total
Western	Adenoma or reactive epithelium	4	17	21
	Suspected or definite carcinoma	0	14	14
	Total	4	31	35

Combining percentage free PSA and prostate volume appears to have exciting prospects, though only two studies have looked at this as yet. One [7] showed that while only 11% of men with BPH and a prostate volume below 30 mL had a percentage of free PSA below 15%, 52% of men with prostate cancer did so. Even better results were reported in the same issue of the same journal [8]. Using a different analysis system, researchers found that men with a prostate volume below 40 mL and a percentage of free PSA below 15% misclassified only one of 16 men with BPH and only one of 26 men with prostate cancer, giving a sensitivity of 94%, specificity of 96% and likelihood ratio of 23.5. We need these observations confirmed in larger prospective studies, because with a prevalence of prostate cancer of 30-40% in patients referred to urologists, this test could save some unnecessary biopsies because it gives a post-test probability of about 95%.

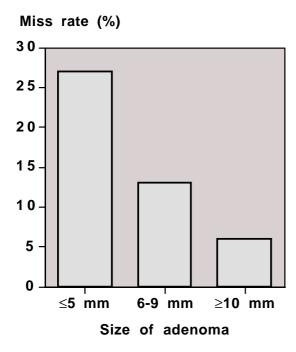
6 Colonoscopy can miss the point

Now you don't see it, now you do! That is the message from a carefully conducted study from Indiana [9]. Patients (186 of them) who needed colonoscopy, and who were able to take two examinations in one day, underwent a second examination following a first examination done in a standard way. All examiners had done more than 500 colonoscopies. The second examination, to find the number of missed adenomas, was randomised between four strategies:

- same position, same examiner
- different position, same examiner
- same position, different examiner
- different position, different examiner

In the initial examination 289 adenomas were found. The second colonoscopy found 89 more, a "miss rate" of 24% (89/378), or rather a miss rate of 31% expressed as a percentage of the first examination. How the second examination was carried out did not seem to matter. The misses included two

Colonoscopy miss rate increases with decreasing size



large (>1 cm) adenomas, and the miss rate increased with decreasing size, as the diagram below demonstrates. Rather different from the marked agreement we saw between endoscopists in *Bandolier* 38.

The interesting question is whether much that is important is being missed. A commentary to the paper in the ACP Journal Club suggests not [10]. But it does ask a really interesting question about how trials to prevent adenomatous polyp growth are judged. If the end point of such trials is detecting polyps on colonoscopy after treatment, but you can spot 24% (or 31%) of those seen initially but don't know that, then maybe the negative results of such trials aren't really negative at all.

Comment

So there are mixed messages coming from the diagnostics world. But perhaps that is not unexpected with people working hard to try and find ways forward in tricky territory. The case of the new PSA test is not atypical. Studies which look at a new test, but where the gold standard verification is flawed, may be judged unjustly.

There may be the odd step backwards, but at least it is accompanied by two steps forward. Anyone wanting to get their brains around some of the difficult issues involved with using an 'evidence-based' prefix in diagnostics could do little better than read Adrian Dixon's comments on diagnostic radiology [11].

References:

- 1 PFW Chien, KS Khan, S Ogston, P Owen. The diagnostic accuracy of cervico-vaginal fetal fibronectin in predicting preterm delivery: an overview. British Journal of Obstetrics and Gynaecology 1997 104: 436-44.
- 2 RG Badgett, CR Lucey, CD Mulrow. Can the clinical examination diagnose left-sided heart failure in adults? Journal of the American Medical Association 1997 277: 1712-9.
- 3 RS Schlemper, M Itabashi, Y Kato, et al. Difference in diagnostic criteria for gastric carcinoma between Japanese and Western Pathologists. Lancet 1997 349: 1725-29.
- 4 J Sakamoto, M Yasue. Do Japanese statistics on gastric carcinoma need to be revised? Lancet 1997 349: 1711.
- 5 LA Eskew, RL Bare, DL McCullough. Systematic 5 region prostate biopsy is superior to sextant method for diagnosing carcinoma of the prostate. Journal of Urology 1997 157: 199-203.
- 6 HB Carter, AW Partin, AA Luderer et al. Percentage of free prostate-specific antigen in sera predicts agressiveness of prostate cancer a decade before diagnosis. Urology 1997 49: 379-84.
- 7 S Egawa, S Soh, M Ohori et al. The ratio of free to total serum prostate specific antigen and its use in differential diagnosis of prostate carcinoma in Japan. Cancer 1997 79: 90-8.
- 8 C Stephan, M Lein, K Jung, D Schnorr, SA Loening. The influence of prostate volume on the ratio of free to total prostate specific antigen in serum of patients with prostate carcinoma and benign prostate hyperplasia. Cancer 1997 79: 104-9.
- 9 DK Rex, CS Cutler, GT Lemmel et al. Colonoscopic miss rates of adenoimas determined by back-to-back colonoscopies. Gastroenterology 1997 112:24-8.
- 10 AI Neugent. Commentary on Rex et al. ACP Journal Club 1997 July / August, 16.
- 11 AK Dixon. Evidence-based diagnostic radiology. Lancet 1997 350: 509-12.

ERECTILE DYSFUNCTION TREATMENTS

Erectile dysfunction has been defined by a National Institutes of Health conference as the inability to achieve or maintain an erection sufficient for satisfactory sexual performance. Erectile dysfunction is strongly age related. As many as 30 million men may be affected in the USA [1]. While there is an estimated prevalence across all ages of about 10% (making erectile dysfunction common), the prevalence rises to over 50% in men between 50 and 70 years of age, though it is not an inevitable consequence of normal ageing [1]. It is also associated with a number of organic disorders and diseases. In diabetes, for instance, it occurs in up to 40% of men. But erectile dysfunction may also occur with cardiovascular disorders (especially in men with angina or after myocardial infarction), neurological disorders, after pelvic surgery or trauma, and as a consequence of pharmacological treatments of a number of diseases [2].

Conditions that are common often become expensive if an effective treatment comes along. For erectile dysfunction what most of us know (or think) is that treatments are reserved for funny boxes in the pages of our more popular newspapers. We might be dimly aware that a number of physical treatments have been used, including semi-rigid or inflatable implants, vacuum constriction devices, and vascular surgery. Some of these can be effective in some men, but they can be expensive and may not be appropriate in every affected man.

New treatments

Bandolier has noticed that new pharmacological treatments are being reported in large and well-conducted trials in our top medical journals. Alprostidil (prostaglandin E1) relaxes corpora cavernosal smooth muscle in vitro, and is effective in the treatment of impotence. Another treatment is sildenafil, which is a phosphodiesterase inhibitor, which also relaxes cavernosal smooth muscle.

The new treatments are effective but delivery systems have been complicated. The idea of intracavernosal injections brings tears to the eyes of many. Intraurethral application seems better, but a pill? Now you're talking.

Just imagine for a moment that there was an effective (and safe) oral treatment that gave men with erectile dysfunction (and their partners) what they wanted. The demand would be large - 10% of all men is 2.5 million in the UK. Half of all men between 50 and 70 (say 300,000 in each year) translates into 3 million men. And all those tired executives.....?

So while treatment of erectile dysfunction may be minor league stuff at the moment, it has the potential to make huge demands on health services. Commissioners need to begin to think about this now.

Intracavernosal alprostadil

A randomised, double-blind, placebo-controlled study [3] investigated different doses of alprostadil injected in to the base of the penis by a nurse. Men in the trial had at least a four month history of erectile dysfunction and were in stable, monogamous heterosexual relationships.

There was a dose-response relationship with intracavernosal alprostadil, with number-needed-to-treat of about 2 at higher doses to produce an erection sufficient for intercourse. The mean duration of erection was also dose-related, being about 12 minutes with 2.5 μ g but over 30 minutes for the higher doses. Priapism developed in one man, and two men had erections which lasted for more than four hours.

Intracavernosal alprostadil µg	Number needed to treat (95% CI)		
2.5	5.9 (3.7 - 14)		
5	3.6 (2.5 - 6.0)		
10	2.2 (1.7 - 3.1)		
20	2.0 (1.6 - 2.7)		

An open-label part of the study, of 683 men who used intracavernosal injections at home over a six month period, demonstrated that this method could be used successfully. Satisfactory sexual activity was reported by men as occurring after 87% of 13,762 injections, and by their partners after 86% of 9,892 injections (not all of them filled out their forms).

Transurethral alprostadil

Men with chronic erectile difficulties and their partners participated in a multi-centre study in the USA [4]. Men had to be in stable, monogamous, heterosexual relationships. All the men (1511) had to have an erectile dysfunction of at least three months duration with a primary organic cause. The study was in two phases:

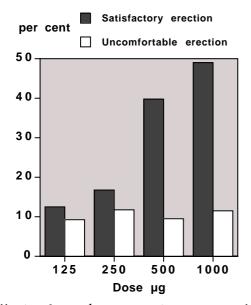
Phase 1 was an evaluation in the clinic of escalating doses of alprostadil using a device which allowed a semi-solid pellet to be applied some 3 cm into the urethra. This was done immediately after urination so that any residual urine would work both to facilitate introduction of the 3.5 mm diameter device, and dissolution of the pellet. Men began with a 125 μg dose or 250 μg , chosen at random; they then used the other dose on a subsequent occasion. Doses were identical in appearance and the administration was double-blind as well as random. Those men who did not have a satisfactory response with 250 μg went on to use 500 μg and 1000 μg doses, again in a random, double blind evaluation of these two doses.

A satisfactory response was graded with an erection assessment scale according to the following score:

- 1 no response
- 2 some enlargement
- 3 full enlargement but insufficient rigidity
- 4 erection sufficient for intercourse
- 5 full rigidity.

Scores were assigned by the men (and confirmed by the investigator), and scores of 4 or 5 were deemed a success. Men also scored their erection as comfortable or uncomfortable. In this phase, 996 men had an erection (score 4 or 5). There was a clear dose-response for effect, but the proportion of men who found it uncomfortable did not differ. Very few men rated their erection as very uncomfortable.

Intraurethral alprostadil - dose response



For all effective doses, the average time to onset of response was about seven minutes, with a maximal response in about 20 minutes, with the erection lasting for about 30 to 40 minutes. There was no effect of age or cause of dysfunction.

Phase 2 was a randomised, double-blind, placebo-controlled evaluation of alprostadil at home in the 996 men who achieved success in the clinic. This has to be thought of as an enriched enrolment. The choice of dose for the men was that which had worked successfully and comfortably for them in the clinic. Successful outcomes were the achievement of at least one intercourse and/or orgasm in a three month period, and any adverse effects were noted.

The main results, expressed as relative benefit or risk and number-needed-to-treat or to harm on an intention-to-treat analysis, are shown below. One in two to three men treated with transurethral alprostadil achieved an erection which enabled them to have intercourse and achieve an organism who would not have done had they received placebo. This was at a cost of some mild penile pain for one in three, mild urethral trauma in one in 25 and dizziness in one in 50.

Adverse effects with alprostadil

Adverse effects were higher after intracavernosal injection than after transurethral application. This was mainly because of a higher number of men reporting penile pain, although penile pain did not occur after a every injection or application. Prolonged erection and priapism did not occur with transurethral application, but this was a problem with intracavernosal injection.

Oral sildenafil

We have only one randomised trial for sildenafil on only 12 men [5]. This is a slightly difficult paper to follow, but again was done in two phases, both of high methodological quality. It was conducted in Bristol on 12 men with more than one and half years history of erectile dysfunction. The first phase was in the laboratory and was aimed at dose-finding. A second randomised cross-over seven day phase at home yielded a mean of 6 erections (95% CI 3 to 11) over seven days for men receiving sildenafil, compared with 1.3 (0.5 to 3) for placebo. On a crude global scale, 10 of 12 men reported improved erectile activity with sildenafil compared with 2 out of 10 with placebo.

Bandolier has also seen an abstract of a larger study [6] on 351 men, implying an NNT of 2 for the highest dose of 50 mg sildenafil where 89% of men reported that sildenafil improved their erections.

Comment

Not all of the treatments are yet licensed in the UK. Perhaps some of them may never be, and if they are, it will be some years away. But there are problems right now. How would you advise a patient who wanted a one week prescription for seven injections of alprostadil at £10 a time? There are hard decisions to be taken.

References

- 1 HA Feldman, I Goldstein, DG Hatzichristou et al. Impotence and its medical and psychosocial correlates: results of the Massechusetts Male Ageing Study. Journal of Urology 1994 151: 54-61.
- 2 KE Hawton. Sexual problems associated with physical illness. Oxford Textbook of Medicine (eds DJ Weatherall, JG Ledingham, DA Warrell), Oxford University Press, 3rd edition, 1997: 4243-7.
- OI Linet, FG Ogrinc. Efficacy and safety of intracavernosal alprostadil in men with erectile dysfunction. New England Journal of Medicine 1996 334: 873-7.
- H Padma-Nathan, WJG Hellstrom, FE Kaiser et al. Treatment of men with erectile dysfunction with transurethral alprostadil. New England Journal of Medicine 1997 336: 1-7.
- 5 M Boolell, S Gepi-Attee, JC Gingell, MJ Allen. Sildenafil, a novel effective oral therapy for male erectile dysfunction. British Journal of Urology 1996 78: 257-261.
- 6 CJ Gingell, A Jardin, AM Olsen et al. A new oral treatment for erectile dysfunction: a double-blind, placebo-controlled, once daily dose response study. Proceedings of the American Urological Association, 1966, 155, 495A.

Outcome	Number with outcome on alprostadil	Number with outcome on placebo	Relative benefit or risk (95% CI)	Number needed to treat or harm (95%CI)
Intercourse	299/486	93/511	3.4 (2.8 - 4.1)	2.3 (2.1 - 2.6)
Orgasm	293/486	118/511	2.6 (2.2 - 3.1)	2.7 (2.3 - 3.2)
Pain	159/486	17/511	9.8 (6.1 - 16)	3.5 (3.0 - 4.0)
Trauma	35/486	5/511	5.3 (2.0 - 14)	25 (16 - 49)
Dizziness	9/486	1/511	9.5 (1.2 - 74)	50 (34 - 250)

OLD CURIOSITY SHOP

Journal clubs and reading more

Bandolier is aware that there is some interesting literature around examining the benefits of various interventions to improve education in healthcare. One such is the Journal Club, adored by some and hated by many. But when you have a good, well-directed journal club, or even one which just works, benefits ensue.

A study examined the effects of journal clubs in the south-eastern USA [1]. A Questionnaire was sent to 74 family practice residency programmes, and 1450 residents of the programmes. Response rates were 89% and 49% respectively.

Results

A few clear results shine through. The first was that most of the directors of the programmes thought journal clubs (usually monthly, examining 4 papers) at least important, and sometimes vital. Attendance averaged 16 people (range 5 to 35), and attendance was highest where directors thought the journal club important, and lowest where they thought it had no impact (some circularity here!).

But the most interesting thing was that those in training, the residents, reported significantly more reading hours of journals, texts and newsletters where there was a journal club (mean 6.6 hours) then where there wasn't (4.8 hours).

How best to do it

Don't mess around, go straight to the experts [2]. Sackett & Co's now classic book has a pile of useful teaching tips - said to be for EBM, but generic really. For journal clubs the advice is a three part approach:

First session: members describe patients who exemplify clinical problems where they are unsure of management. Discuss till a problem can be defined. Members then set out to search for evidence for next journal club.

Second session: results of search for evidence are shared. Discuss and agree which are worth studying, for detailed discussion at next journal club.

Third session: discuss and critically appraise the evidence relating to the problem defined in session one and triaged in session two. Discuss how the evidence can be applied to future patients.

Now all three parts form one journal club meeting, with the third session being the "meat and potatoes". But the systematic approach through consecutive meetings of problem-search-solution provides ongoing glue.

And for those who lecture or organise lecturers or grand rounds, Sackett & Co's book has lots of useful information on that, too. It has had rave reviews recently in both JAMA and Annals of Internal Medicine in the USA. *Bandolier* likes and uses it a lot.

References:

- 1 JG Van Derwood, PE Tietze, MC Nagy. Journal clubs in family practice residency programs in the Southeast. Southern Medical Journal 1991 84: 483-7.
- 2 DL Sackett et al. Evidence-based medicine: how to practice & teach EBM. Churchill Livingstone 1997 ISBN 0-443-05686-2, £14.99.

NET NEWS

New journal on the net

A new journal was launched on 14 July 1997. "World Wide Wounds; The Electronic Journal of Wound Management Practice" will be published entirely on the Internet. It is published by The Surgical Materials Testing Laboratories in Bridgend, which has an international reputation for its work in the testing and evaluation of medical disposables and dressings.

The URL is: http://www.smtl.co.uk/World-Wide-Wounds/

World Wide Wounds will be available free of charge. *Bandolier* has sneaked a look and found it useful. There was some interesting stuff on latex allergy, and if the editors can promote an evidence-based approach this will be a useful resource.

Best links to EB healthcare

It is dangerous to use the term 'best' about anything, but Andrew Booth's "Netting the Evidence Guide" is superb. It can viewed at:

http://www.shef.ac.uk/~scharr/ir/netting.html

The new version contains initiatives such as SHPIC, SIGN and PRISE, expanded sections on finding and filtering the evidence and an experiment - a virtual Core Library for Evidence Based Practice. The latter links together full text documents off the Web that are key resources for EBP, like "EBM: What it is", user guides, systematic reviews series from Annals Of Internal Medicine, Trish Greenhalgh's new BMJ series etc. This slightly lengthened version also has a clickable alphabetical index so for example you can click on S and go straight to SIGN and SHPIC.

Bandolier also checked out the print resource guide: The ScHARR Guide to Evidence Based Practice. This 110 page resource guide provides a bibliography of EBM to the beginning of 1997 and contains a directory of other CD-ROM, Internet and print products in support of EBP. It's packed with all the information you might want. It costs £10. Make cheques payable to "University of Sheffield".

Suzy Paisley Senior Information Officer School of Health & Related Research (ScHARR) Regent Court 30 Regent Street SHEFFIELD S1 4DA Tel: 0114 222 5420 Fax: 0114 272 4095

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- share your experiences of developing and implementing clinical effectiveness strategies?
- help shape the future direction of clinical effectiveness in the NHS?
- establish a network of interested individuals?

If you feel you can contribute to the development of clinical effectiveness and would like to attend a national meeting please contact Lesley Chapman, Centre for Best Practice, Leicester Royal Infirmary, telephone 0116 258 6642 for further details and an application form.

Supported by Oxford and Anglia Research and Development Spaces are limited so apply early.

CENTRE FOR EVIDENCE-BASED CHILD HEALTH

'How to practise evidence-Based Child Health' Training courses on

26-28 November 1997 and 27-29 May 1998

These are an intensive three day courses consisting of plenary seminars, small group problem-solving & appraisal sessions using examples in child health, and practical sessions on how to search the scientific literature. Key features are an emphasis on multiprofessional group learning with a high tutor-participant ratio.

They are based on clinical practice and policy problems in child health and are relevant to professionals from all sectors of the health service and others whose work relates to child health.

Further Details: Administrator, Centre for Evidence-Based Child Health, 30 Guilford Street, London. WC1N 1EH.Tel: 0171 242 9789 ext. 2606. E-mail: cebch@ich.ucl.ac.uk. Fax: 0171 831 8233.

KING'S FUND

Mental Health in the City

An international conference hosted by the King's Fund and the Bethlem and Maudsley NHS Trust on 27-29 October 1997. It will be useful for:

- Professionals with responsibilities in multidisciplinary mental health services
- Users, carers and voluntary workers
- Policy- and decision-makers in public services

For a brochure and application form, please contact Silva Roberts at the King's Fund on 0171 307 2592

BOOK REVIEW

Hystories: Hysterical Epidemics and Modern Culture. Elaine Showalter. PICADOR, London 1997, pp207. ISBN 0330346709. £16.99

Elaine Showalter is Professor of English at Princeton University. This terrific book takes the reader through the classic work of Charcot and Freud to what she calls the modern epidemics of hysteria, spread by stories - hence the term hystories.

Chronic Fatigue Syndrome, Gulf War Syndrome, Recovered Memory, Multiple Personality Syndrome, Satanic Ritual Abuse and Alien Abduction are all dissected elegantly as hystories. The roles of the media and religion as intermediaries are spotlighted and there is a lovely twist to what are perceived as predominantly female hystories (Chronic Fatigue, Recovered Memory, etc.) and the male variants (Gulf War Syndrome). This links back to shell shock in the World Wars, and to *Bandolier's* reading last summer of Pat Barker's beautiful First World War trilogy "The Regeneration Trilogy".

In the hystories book I particularly enjoyed the idea that there is, in any given culture, a legitimate symptom pool. Hysteria mimics culturally permissible expressions of distress. "An Englishman can legitimately complain of headache or fatigue but not that his penis is retracting into his body - a perfectly legitimate symptom in Malaysia and South Asia". This links beautifully to two bees in *Bandolier's* bonnet, to Medically Unexplained Physical Symptoms (MUPS), to the type of reassurance, and to how that reassurance is provided.

There are many obvious medical hystories. Drug scares on the media, like contraceptives and thrombosis, result in personal disaster, and we don't seem to have improved the way we handle such pronouncements (or the criteria for making them). Wearing <code>Bandolier's</code> EB hat perhaps the most important twist is how do you prove that there is no medical basis to hystories? The glaring example at present is Gulf War Syndrome - how can you be certain that there is no biological cause? Professor Showalter uses the words evidence, testimony and proof in the same sentence. While in medicine we tend to substitute anecdote for testimony, and relish the pejorative connotations, we struggle as our masthead reflects to sort out when something is conclusively proven. For hystories, as in many other aspects of medicine, our uncertainties reveal more than our certainties. Best read this year.

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